after paragraph [0002], insert the following new paragraph:

[0002.5]   Description of the Prior Art

Page 2, replace paragraph [0005] with the following amended paragraph:

[0005] In the conventional way, until now it was possible to reduce such problematic effects only by employing very expensive materials, such as Invar, that have a negative temperature expansion. Another way was to connect a material of high temperature expansion in series with the piezoelectric element, but that reduces the rigidity of the system and hence the useful force.

replace paragraph [0006] with the following amended paragraph:

[0006] SUMMARY OF THE INVENTION

Page 5, replace paragraph [0012] with the following amended paragraph:

[0012]   In a first application of the piezoelectric actuator of the invention, the end of the piezoelectric element by which it rests on the pressure plate, and thus exerts a force on the actuating element, can advantageously be disposed on the far side of the piezoelectric actuator in terms of the effective direction. In that case, the useful force of the piezoelectric actuator is a tensile force.

delete paragraph [0014]:

replace paragraph [0015] with the following amended paragraph:

[0015] BRIEF DESCRIPTION OF THE DRAWINGS

Page 6, replace paragraph [0016] with the following amended paragraph:

[0016] Exemplary embodiments of the piezoelectric actuator of the invention with a

2

narrow design, for instance for positioning a valve, will be explained herein below in conjunction with the drawings, in which:

Page 7, replace paragraph [0025] with the following amended paragraph:

[0025] DESCRIPTION OF THE PREFERRED EMBODIMENTS

Page 8, replace paragraph [0028] with the following amended paragraph:

[0028]   The prestressing force F_7 of the spring 7 must be substantially less than the prestressing force F_4 of the spring 4, so that for the maximum useful force F_u, in this case in the form a tensile force, of the piezoelectric actuator 1, the following equation applies:

$$F_u = F_4 - F_7$$

replace paragraph [0030] with the following amended paragraph:

[0030]   Figs. 2 and 3 each show an arrangement of barlike piezoelectric elements 2 and compensating elements 3 in a section along the line A-A in Fig. 1. The lead bondings 10, 11 of the piezoelectric elements 2 are done in the Y axis direction in the arrangement of Fig. 2, while lead bondings 12, 13 in Fig. 3 are done in the X direction.

replace paragraph [0031] with the following amended paragraph:

[0031]   In Fig. 4, an arrangement with hollow-cylindrical piezoelectric elements 2 and compensating elements 3 can be seen, again in a section along the line A-A

of Fig. 1. In this arrangement, the lead bondings 14 and 15 of the piezoelectric element 2 are mounted on the radial side faces of the piezoelectric element 2.

Page 9, replace paragraph [0032] with the following amended paragraph:

[0032]   A second exemplary embodiment of the piezoelectric actuator 1 is shown in Fig. 5, in which the components that function the same are provided with the same reference numerals as for Fig. 1. In the arrangement of Fig. 5 as well, the piezoelectric element 2 is of a suitable piezoceramic; a compensating element 20, however, is also constructed as a piezoelectric element, and in a modification of the example of Fig. 1, these elements 2 and 20 are pressed by the spring 4 via the spring plate 5 against a fixation edge located at the top of the housing 6.

replace paragraph [0033] with the following amended paragraph:

[0033]   The piezoelectric element 2 is layered transversely, so that when an electrical voltage is applied, it lengthens, as in the first exemplary embodiment. The piezoelectric layers of the compensating element 20 are conversely longitudinally layered or stacked, so that they shorten in the effective direction when an electrical voltage is applied to the piezoelectric actuator 1.

replace paragraph [0034] with the following amended paragraph:

[0034]   The prestressing force of the spring 7, by way of which the lower end of the piezoelectric element 2 rests on the housing, must be substantially less than the prestressing force of the spring 4, so that for the maximum useful force F_u, in this case in the form of a compressive force, of the piezoelectric actuator 1, the following equation applies:

$$F_u = F_7 - F_4$$

Page 11, insert the following new paragraph:

[0038]   The foregoing relates to preferred exemplary embodiment of the invention, it being understood that other variants and embodiments thereof are possible within the spirit and scope of the invention, the latter being defined by the appended claims.

Page 12, delete "New Claims 1-7" and insert --We Claim--.

5